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June 22, 2018

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

**Re: Duke Energy Progress LLC's and Duke Energy Carolinas, LLC's Petition
For An Accounting Order to Defer Certain Capital and Operating Expenses
Related to Grid Reliability, Resiliency and Modernization
Docket No. 2018-____-E**

Dear Ms. Boyd:

Enclosed for filing, please find Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's Petition for an Accounting Order to Defer Certain Costs Related to Grid Reliability, Resiliency, and Modernization.

Thank you for your attention to this matter. Should you have any question, please feel free to contact me.

Sincerely,

Heather Shirley Smith

cc: Ms. Nanette Edwards, Esq., Office of Regulatory Staff
Ms. Dawn Hipp, Office of Regulatory Staff
Mr. Jeffrey M. Nelson, Esq. Office of Regulatory Staff

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA

In re:)	PETITION OF DUKE ENERGY
)	CAROLINAS, LLC AND DUKE
Joint Petition of Duke Energy Carolinas, LLC)	ENERGY PROGRESS, LLC FOR
and Duke Energy Progress, LLC for an)	AN ACCOUNTING ORDER TO
Accounting Order to Defer Certain Costs)	DEFER CERTAIN COSTS
Related to Grid Reliability, Resiliency, and)	RELATED TO GRID
Modernization)	RELIABILITY, RESILIENCY AND
)	MODERNIZATION

Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress, LLC (“DEP”) (collectively, the “Companies”) hereby petition the Public Service Commission of South Carolina (the “Commission”) pursuant to S.C. Code Section 58-27-1540, S.C. Code Reg. 103-825, and other applicable rules and regulations of the Commission, for an accounting order for regulatory and financial accounting purposes authorizing the Companies to defer in a regulatory asset certain costs incurred in connection with grid reliability, resiliency and modernization work that is being performed under the Companies’ Power/Forward initiative (“Power/Forward”). The Companies seek to defer the incremental Operating and Maintenance (“O&M”), depreciation and property taxes associated with certain capital assets installed as part of its Power/Forward work, as well as the carrying cost on the investment and on the deferred costs at each utility’s weighted average cost of capital, of approximately \$17 million for DEC and approximately \$7 million for DEP until the rate effective dates of each Company’s next general rate case.

The request for relief set forth within this Petition does not involve a change to any of the Companies’ retail rates or prices at this time or require any change in any Commission rule, regulation, or policy. In addition, the issuance of the requested accounting order would not

prejudice the right of any party to address the prudence of these costs in the Companies' next general rate case proceeding. In support of this Petition, the Companies respectfully show the Commission the following facts and petitions the Commission for the following relief:

Name and Address of the Companies

1. The correct name and post office address of DEC are:

Duke Energy Carolinas, LLC
Post Office Box 1321
Charlotte, NC 28201

2. The correct name and post office address of DEP are:

Duke Energy Progress, LLC
410 S. Wilmington Street, NCRH 20
Raleigh, North Carolina 27601

Notices and Communications

The name and addresses of the Companies' attorneys who are authorized to receive notices and communications with respect to this Petition are:

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and

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Description of the Companies

DEC is engaged in the generation, transmission, distribution, and sale of electric energy at retail in the western portion of South Carolina and the central and western portions of North Carolina. The Company also sells electricity at wholesale to municipal, cooperative, and investor-owned electric utilities and its wholesale sales are subject to the jurisdiction of the Federal Energy Regulatory Commission.

DEP is engaged in the generation, transmission, distribution, and sale of electric energy at retail in the eastern portion of South Carolina and portions of western, central, and eastern North Carolina. DEP also sells electricity at wholesale to municipal, cooperative and investor-owned utilities, and its wholesale sales are subject to the jurisdiction of the Federal Energy Regulatory Commission.

DEP and DEC are corporations organized and existing under the laws of North Carolina, are authorized to transact business in the State of South Carolina, and are public utilities under the laws of South Carolina. Accordingly, the Companies' operations in South Carolina are subject to the jurisdiction of the Commission pursuant to the provisions of Chapter 27 of Title 58 of the South Carolina Code of Laws.

Power/Forward Grid Reliability, Resiliency and Modernization

The Companies' electric power grids in use today are largely the same as were created to service areas of expansion following World War II through about 1980. During that timeframe, electricity only had to flow one way, from the generator to the consumer, and if the power went out, it was, at worst, an inconvenience. Today, a power outage is no longer just an inconvenience. Power outages and voltage swings can have dramatic impacts on industrial and commercial output, cause spoilage, and dramatically impact productivity. Customers rely on

consistent power to keep connected with family and friends, to earn a living and to maintain economic systems.

The Companies' Power/Forward initiative will address the current, and future, needs of the grid over the next decade and beyond for South Carolina. Power/Forward consists of upgrades that will harden the system against storms and outages, further protect it against cyberattacks and physical threats, help expand renewable energy, generate jobs and stimulate economic growth. It will also give 740,000 customers in the State more information to manage their energy use. Power/Forward includes several major programs that will work together to deliver customers solutions that are both operationally and cost effective: Targeted Undergrounding, Distribution Hardening and Resiliency, Transmission Improvements, Self-Optimizing Grid, Advanced Metering Infrastructure ("AMI"),¹ Communication Network Upgrades, and Advanced Enterprise Systems.

The Targeted Undergrounding program will convert overhead lines prone to power outages from overhead to underground construction. Undergrounding may be seen as an older technology, but through innovative data analytics, Targeted Undergrounding at key locations is not a beautification measure as it has been thought of in the past; rather it is a new methodology to relieve outage prone areas from service interruptions. Targeted undergrounding will improve storm response and reliability by using smart data to strategically identify the most outage-prone power lines, and move those lines underground. The innovative use of data to identify these persistent outages will allow the Companies to significantly reduce power outages and

¹ Given the speed at which the AMI deployment will be accomplished for DEP, the Company has requested deferral separately for AMI for DEP. The Company already has a deferral in place for AMI for DEC. As information, AMI allows the deploying of digital smart meters and associated communication devices to provide enhanced customer billing and payments options, detailed usage data, and energy-savings tools, as well as enhanced operational function such as automated meter reading, remote serve connections and outage detection.

momentary interruptions in these outage-prone areas, and eliminate 30 percent of all outage events.

The Distribution Hardening and Resiliency program focuses on upgrading equipment to strengthen the grid and protect it against severe weather and other disruptions (hardening) and to minimize the impacts of events and improve ability to recover rapidly when an event occurs (resiliency). This program also addresses asset end-of-life opportunities, system design, and strengthens the grid against physical and cyber security attacks.

The Transmission Improvements program will deploy equipment upgrades, provide flood mitigation, physical and cyber security and system intelligence to make a smarter, more reliable and secure transmission system. The transmission improvement program will address the following: (1) *security*- detection, prevention and withstanding of increasingly sophisticated and malicious attacks (physical and cyber incidents) on its integrity and operations; (2) *hardening*- programs to limit damage and disruption during an event; (3) *adaptability*- ability of the system to adjust to new conditions while maintaining its intended function and purpose.²

The Self-Optimizing Grid program is an investment to build a “smart thinking grid” to build a more resilient distribution system that is better able to isolate problems and re-route power to minimize impacts to customers and communities. This smart-thinking grid will mean fewer outages and faster restorations for customers, thanks to an intelligent network that anticipates outages and instantly reroutes service to keep power on for customers. Building on self-healing technologies already on the grid, this automated, self-optimizing grid will be able to

² For example, automation, intelligence and controls will help address DER-generated power quality issues while enabling the circuit to reliably serve other transmission loads. Digital devices and condition based monitoring will provide more system data that will improve analytics and risk-based proactive/predictive asset management to increase reliability and reduce cost.

make real-time decisions, isolating an outage and reducing its impact on customers by as much as 75 percent. It will also provide the foundation for the two-way power flows needed to support more rooftop solar, battery storage and microgrids.

The Communication Network Upgrades will provide high-speed, high bandwidth, secure communications pathways (fiber optic and wireless) for the increasing number of smart components, sensors, and enable activated devices on the transmission and distribution systems.

The Companies' Advanced Enterprise Systems program focuses on upgrading systems that manage grid devices, monitor equipment health, analyze data from monitoring sensors to improve system operations and maintenance activities, and enable grid self-optimizing technologies.

The Companies must also respond and prepare for a green energy future driven by distributed energy resources such as solar and wind installations, and battery storage both large and small. This requires a transformation of the electric power grid, one that allows the Companies to match flexible, diverse, low-carbon supply with demand, through sophisticated real-time sensing and software. This means converting the grid from a radial one-way design to a two-way distribution system that can automatically route power from where it is produced, regardless of where that happens on the system, to where it is needed. The Companies have made excellent use of the existing grid system, but they and other utilities throughout the nation, must address issues such as distributed energy resources, physical and cyber security, increased convective weather events and increased customer reliance and expectations since the grid was initially built. Power/Forward will ensure the grid is more resilient, responsive and interactive for the 21st century environment.

Additional Detail and Request for Relief

The Companies respectfully request Commission approval to defer the financial effects of Power/Forward work, including incremental O&M, depreciation expense and property tax, as well as the carrying costs on the investment and on the deferred costs at each utility's weighted average cost of capital, until the rates effective date in each utility's next general rate case, of approximately \$17 for DEC and \$7 million for DEP. These amounts represent the Companies' efforts from 2018 through mid-2019 as they relate to the Power/Forward work plans as outlined below.³

As to Targeted Undergrounding, DEC is working on executing targeted underground projects in four counties in South Carolina in 2018 and nine counties in South Carolina in 2019 with the majority of overhead line conversions, by line miles, occurring in Spartanburg County. Similarly, DEP is working on executing targeted underground projects within three counties in South Carolina in 2018 and eleven counties in 2019 with the majority of overhead line conversions, by line miles, occurring in Sumter County in 2018 and Florence County in 2019.

For Hardening and Resiliency projects, the Companies' focus will be on projects to address obsolete underground cable and overhead conductors and back-feed connectivity and capacity for rural communities and business districts that experience long duration outages (long duration outage projects). For DEC, the overhead conductor replacements span seven counties in South Carolina in 2018 with the most projects occurring in Greenville County and six counties in 2019 with the most projects occurring in Spartanburg County. The underground cable

³ Work scheduling is dependent on many factors such as what other work is occurring in the area and the availability of crew resources. This work is typically scheduled, on average, two month in advance of actual construction.

replacements span three counties in South Carolina in 2018, with the most projects occurring in Spartanburg County, and five counties in 2019, with the most projects occurring in Greenville County. Long duration outage projects will occur in four counties in the State in 2018 and five counties in 2019. Notable DEC projects will improve reliability of hospitals, airports, and rural communities and business districts on long-radial distribution lines. For DEP, the focus will be on obsolete underground cable and overhead conductors, and back-feed connectivity and capacity for rural communities and business districts that experience long duration outages (long duration outage projects). These overhead conductor replacements span nine counties in South Carolina in 2018 with the most projects occurring in Lee and Marlboro counties, and ten counties in 2019, again with most projects occurring in Lee and Marlboro counties. The underground cable replacements will occur exclusively in Sumter County in 2018 and will span eight counties in South Carolina in 2019 with most projects occurring in Sumter and Darlington Counties. Long duration outage projects will occur in two counties in the State in 2018. A notable project will improve reliability of hard to access lines crossing the Pee Dee River. Long duration outage projects will occur in nine counties in the State in 2019. Notable DEP projects will improve reliability of inaccessible distribution lines and on long-radial distribution lines.

The Companies' advancement of a self-optimizing grid consists of 81 projects in 2018 and 78 projects in 2019, spread across the DEC South Carolina territory. The top three areas, by number of projects, are areas in and around Greenville, Spartanburg, and Anderson counties. DEC self-optimizing grid projects are also planned in Chester, Greenwood, Lancaster, Oconee, Pickens and York Counties. As for DEP, self-optimizing grid work will be focused on 25 projects in 2018 and 38 projects in 2019, spread across the DEP South Carolina territory. The top three areas, by number of projects, are areas in and around Florence, Sumter, and Darlington

Counties. Projects are also planned in Chesterfield, Clarendon, Dillon, Kershaw, Lee, and Marlboro Counties.

From a Transmission standpoint, in 2018 and 2019, the Companies' planned transmission projects focus primarily on hardening and resiliency to improve reliability and address environmental issues. This work includes replacing oil-filled and high-volume gas breakers in many substation locations across the system; and improvements on aged and deteriorated components. The Companies will also be installing equipment to enhance the physical security at substations. Lastly, planning, design, and installation for the system intelligence work will continue through this year and into 2019.

Without the accounting treatment requested by the Companies, these costs incurred and being incurred for the projects described above will negatively impact the Companies' financials on a project by project basis, and unlike capital projects of similar financial magnitude, the Companies will not recover its time value of money in the form of allowance for funds used during construction. Instead, the Companies' earnings are negatively impacted every time an individual Power/Forward project is completed as it creates an instant degradation to the Companies' financials. This deferral will allow the Companies to bridge this timing gap until the Companies' next rate case while completing work that will enable the customer benefits listed above.

Under Generally Accepted Accounting Principles ("GAAP") and in accordance with the FERC's Uniform System of Accounts (as adopted by this Commission), the cost of assets such as these Power/Forward expenditures are recorded on the Companies' balance sheets as utility plant in service and are charged to expense over the period in which these assets provide utility service and contribute to the earnings process. This systematic and rational allocation of an

asset's costs over its service life and period of benefit is referred to as depreciation and amortization. Depreciation and amortization allow for the matching of expenses associated with an asset to the revenue that the Companies recognize as a result of utilizing that asset to provide service. Under GAAP, this is referred to as the matching principle and is a fundamental concept in the accounting model. As part of electric utility rate-making, annual depreciation and amortization expenses are included within the utility's Commission approved base rates. The incremental annual depreciation and amortization expense that the Companies expect to incur as described above are not currently included within the Companies' existing base rates. Therefore, it is not possible for the Companies to "match" this expense with revenue to be collected. With such a mismatch of expense to revenue, this event is a fundamental departure from the matching principle.

Additionally, as the Companies are deferring revenues from the federal Tax Cuts and Jobs Act ("TCJA") which is the subject of Docket No. 2017-381-A, for application in the Companies' next rate cases, it is appropriate and equitable to defer costs not currently in rates for consideration in the Companies' next rate cases so that the Commission and parties can evaluate the matter in a fulsome manner.

The Companies believe that this request is consistent with the case law and policy in this State.⁴ The request does not involve a change to any DEC or DEP rate or tariff. As a result, neither notice to the public nor a hearing is required. Absent the deferral, the Companies will face earnings degradation from the increased expenses arising from the current and near term

⁴ See e.g., *In re: Petition of South Carolina Electric & Gas Company for an Accounting Order to Defer the Depreciation and Amortization Expenses as Well as the Incremental Operation and Maintenance Expenses That Will Be Incurred as a Result of Complying with the Cyber Security Regulations Promulgated by the United States Nuclear Regulatory Commission*, Docket No. 2015-372-E, Order No. 2015-790 (Nov. 4, 2015).

Power/Forward initiative. These effects could impair the Companies' financial stability and ability to attract capital on reasonable terms.

Approval of this deferral request will benefit the Companies and their customers by helping to assure investors' confidence in DEC and DEP, and help assure access to needed capital on reasonable terms and equitable treatment as to deferred costs and revenues. To mitigate the impact to customers of the requested deferral, DEC will propose in its next rate case to amortize these deferred costs over a multi-year period.

Impact of the Federal Tax Cuts and Jobs Act

This Petition reserves the expenses identified herein and incurred as the Company evaluates the impacts of the Federal TCJA, which is the subject of Docket No. 2017-381-A (the "Tax Reform Docket"). The Company has committed in the Tax Reform Docket to deferring as a regulatory liability (1) all excess accumulated deferred income tax balances created in 2017 by the TCJA Act and (2) the estimated difference between customer revenues actually billed and what would have been billed taking into effect the reduced corporate tax rate beginning January 1, 2018, until the Commission determines the timing and nature of returning such benefits to retail customers ("deferred tax benefits"). As the Company defers revenues, it is important to defer material costs as identified in this Petition as well such that total impact of the changes affecting the Company's business can be evaluated in future rate proceedings.

Conclusion

An accounting order granting the relief that the Companies seek will not preclude the Commission or parties from addressing the reasonableness of the costs deferred for Power/Forward work in the next general rate proceedings filed by DEC and DEP. Therefore, as described above, the Companies respectfully petitions the Commission to allow DEC and DEP to

defer into a regulatory asset until the Companies' next general rate cases incremental O&M, depreciation, and property taxes associated with certain capital assets installed as part of its Power/Forward work, as well as the carrying cost on the investment and on the deferred costs at each utility's weighted average cost of capital, in an amount of approximately \$7 million (DEP) and \$17 million (DEC) until the Companies' next general rate cases.

Dated this 22nd day of June 2018.

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